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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/740,494	12/18/2000	David J. McCullough	55063-0036	4819

21839 7590 05/07/2004

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EXAMINER

SON, LINH L D

ART UNIT	PAPER NUMBER
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2135

DATE MAILED: 05/07/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

27

Office Action Summary

Application No.

09/740,494

Applicant(s)

MCCULLOUGH ET AL.

Examiner

Linh LD Son

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
2. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rekhter et al, hereinafter "Rekhter", (US/6526056), and in view of Alles et al (US/6466976).
3. As per claim 1, Rekhter discloses the "Virtual private network employing tag-implemented egress-channel selection" invention, which includes a method of forming a peer-to-peer, scalable bandwidth connection between a first computer system and a second computer system each connected to a public computer network. Rekhter discloses a computer system at CE1 and another at CE2 (Fig 1, Col 6 lines 33-67). CE1 and CE2 are the edge routers. CE1 and CE2 are connected to the public computer network by the point-to-point link connected to the service provider PE1 and PE2. One of the endpoints must know the other IP address in order to initiate a communication. It is well known in the art. Further in (Col 7 line 39 to Col 8 line 54), Rekhter teaches the routing of a PPP connection within a VPN connection implies one or many possible PPP connections can be

established within the VPN channel tunneling from CE2 to CE1 or Vice versa.

However, Rekhter does not teach the bandwidth available to the superior virtual circuit is equal to the minimum aggregate bandwidth of the available physical point-to-point links between either the first or second computer system.

Nevertheless, Alles et al does teach the method of using the service police for the aggregate bandwidth for a certain used (Col 7 lines 50-60). Therefore, it is obvious at the time of the invention was made for one of ordinary skill in the art to implement the teaching of Alles et al and Rekhter together to consolidate all data packet for a destination to one stream of data for security purpose and at same time minimize the number of connections in a link.

4. As per claims 2 and 3, Rekhter and Alles et al disclose a method of forming a peer-to-peer, scalable bandwidth connection between two computer systems connected to a public computer network as recited in claim 1, wherein the superior virtual circuit is formed by encapsulating network protocol data with a security protocol, IPSec tunneling (Col 1 line 10).
5. As per claim 4, Rekhter and Alles et al disclose a method of forming a peer-to-peer, scalable bandwidth connection between two computer systems connected to a public computer network as recited in claim 3, wherein bundling is achieved through network layer packet fragmenting when the IPSec in tunnel mode is extensible through a firewall (Alles et al, Col 7 lines 50-60).

6. As per claim 5, Rekhter and Alles et al disclose a method of forming a peer-to-peer, scalable bandwidth connection between two computer systems connected to a public computer network as recited in claim 1, wherein, when the security protocol is blocked by a firewall, the security protocol is additionally encapsulated with a standard transport protocol to make the tunnel extensible through a firewall (Col 3 lines 53-63, and Col 4 lines 35-65, and Col 18 lines 59-67).
7. As per claim 6, Rekhter and Alles et al disclose a method of forming a peer-to-peer, scalable bandwidth connection between two computer systems connected to a public computer network as recited in claim 5, wherein the standard transport protocol is TCP (Col 3 lines 30-42).
8. As per claim 7, Rekhter and Alles et al disclose a method of forming a peer-to-peer, scalable bandwidth connection between two computer systems connected to a public computer network as recited in claim 1, wherein the first computer system connects to the public computer network through a local area network (Col 35 line 14).

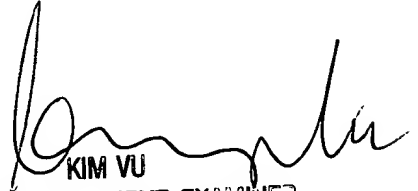
Conclusion

9. Any inquiry concerning this communication from the examiner should be directed to Linh Son whose telephone number is (703)-305-8914 or Fax to 703-746-9821.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Kim Y. Vu can be reached at (703)-305-4393. The fax numbers for this group are (703)-872-9306 (official fax). Any inquiry of general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703)-305-9600.

Linh LD Son

Patent Examiner


KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100